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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/628,479	07/31/2000	Adam Their	11553-018001	5538
28863 7	590 03/01/2004		EXAMINER	
SHUMAKER & SIEFFERT, P. A.			PATEL, JAGDISH	
8425 SEASON SUITE 105	IS PARKWAY		ART UNIT	PAPER NUMBER
ST. PAUL, MN 55125			3624	

Please find below and/or attached an Office communication concerning this application or proceeding.

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·	Application No.	Applicant(s)				
	09/628,479	THEIR ET AL.				
Office Action Summary	Examiner	Art Unit				
	JAGDISH N PATEL	3624				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	vith the correspondence addre	ss			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replied in the period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a ply within the statutory minimum of th d will apply and will expire SIX (6) MO te, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this comm BANDONED (35 U.S.C. § 133).	unication.			
Status						
1) Responsive to communication(s) filed on <u>09</u> .	<i>July</i> 2003.					
,	is action is non-final.					
3)☐ Since this application is in condition for allows			erits is			
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-33</u> is/are pending in the application	n.					
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	· · · <del></del>					
6)⊠ Claim(s) <u>1-33</u> is/are rejected.						
7) Claim(s) is/are objected to.	(an alastian magninomant					
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9) The specification is objected to by the Examin						
	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
11) I he oath or declaration is objected to by the E	Examiner. Note the attache	ed Office Action or form PTO-	132.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Bures * See the attached detailed Office action for a list	nts have been received. nts have been received in ority documents have bee au (PCT Rule 17.2(a)).	Application No n received in this National Sta	age			
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🗌 Interview	Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	o(s)/Mail Date	•••			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 9.16.	5)  Notice of 6)  Other: _	Informal Patent Application (PTO-15	2)			

Art Unit: 3624

#### DETAILED ACTION

1. This communication is in response to amendment filed 7/9/03, which was filed in reference to prior office action dated 5/9/02.

# Response to Amendment

- 2. Claims 1,2 6-11, 13-16, 20, 22, 26, 28 and 29 have been amended and claim 17 has been canceled per request.
- 3. This is a non-final office action, which addresses new ground of rejection(s) not necessitated by the applicant's amendment.

### Response to Arguments

4. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

# Claim Rejections - 35 USC § 101

#### 5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-9, 15-16 and 18-33 are rejected under 35 U.S.C. 101 because the claim d invention is directed to non-statutory subject matter.

Page 3

#### 6.1 Not within technological art (claims 1-9, 15-16 and 18-19)

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See In re Musgrave, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of \$101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by \$101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See Diamond v. Diehr, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as

mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See State Street Bank & Trust Co. v. Signature Financial Group, Inc. 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See In re Toma, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In Toma, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under °101, but rather under §\$102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a \$101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 1-9, 15-16 and 18-19 have no connection to the technological arts (noting that capturing forecast data via a communication network is a trivial use of technology which still leaves critical limitations outside technological art). None of the steps indicate any connection to a computer or technology. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts such as receiving the target data and the forecast data and reconciling the data at a server or a computer.

# 6.2 <u>Claims 10-13 and 31-33</u> are rejected as not limited to a "practical application". (Exemplary analysis provided for claim 10 as applicable to other claims)

Claim 10: The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain

Art Unit: 3624

some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful. Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

Regarding claim 10, the process underlying the system is capturing forecasting data and target data from respective entities and subsequently reconciling the captured data by the server. Reconciling is a mathematical process and at best the underlying steps are interpreted as a mathematical algorithm

(which is to match up two sets of data in accordance with predetermined organizational level.) However, the claim as a whole fails to recite any outcome of the reconciliation process to produce a "useful, concrete and tangible" result, i.e. reduce the claimed invention to a practical application. Therefore, claim 10 is analyzed as non-statutory subject (an abstract idea without a practical application).

Note that this analysis is also applicable to dependent claims 11-13. System claims 31-33 are similarly analyzed as per system claims 10.

#### 6.3 Claims 20-30 recite Non-functional Data Structure

Claims 20-30 are rejected under 35 USC § 101 because the claimed inventions are directed to non-statutory subject matter. Claims 20-30 are directed to disembodied data structure which are per se are not statuatory (In re Warmerdam, No. 93-1294 (Fed. Cir. August 11, 1994)). A claim to a computer-readable medium encoded with functional descriptive material that can function with a computer to effect a practical application that results in a useful, concrete and tangible result (i.e. executing a stock transaction or generating an investment portfolio) satisfies section 101. See U.S. Patent 5,710,578 to Beauregard et al.

Application/Control Number: 09/628,479 Page 9

Art Unit: 3624

# Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 2, 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites limitations "presenting the target data and the forecast data to the selected contributors", "receiving review information from the selected contributors.." and finally "updating the current level of the organizational hierarchy.." do not relate to the method steps of claim 1 because"

- (1) the forecast data and the target data are received from "a set of contributors according to a ..organizational model" and "a set of analysts" neither of these entities are affected by process of claim 2.
- (2) the reconciliation step of claim 1 is performed independent of "updating the current level of organizational hierarchy" step because it a function of the target data and the forecast data obtained from the respective set of contributors.

Art Unit: 3624

These deficiencies renders claim 2 (and dependent claims 8 and 9) indefinite as not clearly related to each other.

Dependent claim 13 recites limitations similar to claim 2 and therefore, analyzed per claim 2.

Claim 3 recites specific manner in which the forecast data is captured. However, limitations of claim 1 would be performed regardless of manner in which the "capturing of data" takes place. In this regard claims 3 and 4 only recites "non functional descriptive material". Such non descriptive material does not futher limit the base claim see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Accordingly, these claims are not further analyzed.

This analysis also applied to claims 11 and 12.

Claim 10 recites limitations "a database" and "a server" which are not functionally related. Dependent claims 11-14 also inherit same deficiency.

# Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 3624

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 3, 4-7, 10-12, and 31-33 rejected under 35 U.S.C. 102(b) as being anticipated by Wainscott et al (WO 96/30852) (hereafter (Wainscott).

Wainscott teaches a method for generating a budget report which incorporates the claimed steps of capturing forecast data (p.4 L 9+ population of initial working budget and updated forecast), capturing target data (p. 12 part of budget modification) and reconciling the forecast data and the target data (p. 12 part of budget modification phase 36) and generating a budget report based on the reconciled forecast data (p. 12 ..Reports are generated and the finalized budget is uploaded..)

Wainscott furthermore teaches that the forecast data is captured from a set of contributors (refer to p. 12 ..initial budget is sent to managers for updates reflecting their business needs and goals, this feature inherently teaches that capturing of the forecast data is performed according to a multi-level organizational model (Wainscott teaches that the set of contributors are part of the hierarchical organizational model as depicted in Figure 8 and explained in P. 21).

Claim 3: receiving the forecast data from a remote computing device over a ..network (Fig. 2 local area network).

Art Unit: 3624

Claim 4 and 5: communicating a template and calculation engine to the computing device .. (Figure 3 and 6).

Claim 6 and 7: ..the model includes a plurality of hierarchically arranged nodes..(Fig. 8 and p.21 and 22).

Claim 10-12: all limitations of claim 10 have analyzed in claim 1 in view of the organization shown in Fig.3 which shows database elements 32,34,36 and 37 which correspond to the database defining a set of contributors as per the multi-level model of the organization discussed in prior claims and server (BPS work station 12 depicting four phases of budget development as explained in p. 11).

Claim 20: refer to analysis of claim 10-12.

Claims 31-33: refer to analysis of claim 1 and 3 collectively.

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jagdish Patel whose telephone number is (703) 308-7837. The examiner can normally be reached Monday-Thursday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin, can be reached at (703) 308-1038. The fax number for Formal or Official

Application/Control Number: 09/628,479 Page 13

Art Unit: 3624

faxes to Technology Center 3600 is (703) 305-7687. Draft faxes may be submitted directly to the examiner at (703) 746-5563.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113 or 308-1114. Address for hand delivery is 2451 Crystal Drive, Crystal Park 5, 7<sup>th</sup> Floor, Alexandria V/2 22202.

Jagdish N. Patel

(Examiner, AU 3624)

2/23/04